

123 FERC ¶ 61,256
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Joseph T. Kelliher, Chairman;
Sudeen G. Kelly, Marc Spitzer,
Philip D. Moeller, and Jon Wellinghoff.

Maritimes & Northeast Pipeline, L.L.C.

Docket No. RP08-374-000

ORDER ACCEPTING AND SUSPENDING TARIFF SHEETS
AND ESTABLISHING TECHNICAL CONFERENCE

(Issued June 11, 2008)

1. On May 12, 2008, Maritimes & Northeast Pipeline, L.L.C. (Maritimes) filed revised tariff sheets¹ pursuant to section 4 of the Natural Gas Act (NGA) to revise its tariff with respect to gas quality and interchangeability. Maritimes proposes an effective date of June 11, 2008. As discussed below, the Commission will accept and suspend the proposed tariff sheets, to be effective November 11, 2008, or an earlier date set by subsequent Commission order, subject to conditions and the outcome of a technical conference.

Details of the Filing

2. Maritimes states that, along with its Canadian pipeline affiliate, Maritimes & Northeast Limited Partnership, it provides transportation for gas reserves from Sable Offshore Energy Project (Sable), offshore Nova Scotia, to markets in Atlantic Canada and the northeastern United States. In the United States, the Maritimes system has mainline capacity of 415,480 Dth/d, and extends from the U.S-Canada border near Calais, Maine to an interconnection with Tennessee Gas Pipeline Company (Tennessee) in Dracut, Massachusetts, and with Algonquin Gas Transmission, LLC (Algonquin) in Beverly, Massachusetts. Maritimes states that this filing has its origin in Maritimes' Phase IV Project certificate proceeding in Docket No. CP06-335.² After completion of the Phase IV Project Maritimes mainline capacity will increase to 833,317 Dth/d, to help meet the growing demand for natural gas in the region by delivering new supplies from the Canaport LNG terminal currently being constructed in Saint John, New Brunswick.

¹ First Revised Sheet Nos. 268, 271, 273 and 274, and Second Revised Sheet Nos. 269, 270 and 272 to Maritimes' FERC Gas Tariff, First Revised Volume No. 1.

² *Maritimes & Northeast Pipeline, L.L.C.*, 118 FERC ¶ 61,137; *rehearing denied*, 120 FERC ¶ 61,055 (2007).

Maritimes states that Repsol Energy North America Corporation (Repsol) has a long-term firm service agreement to use the Phase IV Project capacity, and following the in-service date of Phase IV, Maritimes throughput is expected to change from primarily Sable supplies to primarily regasified LNG from the Canaport terminal. Maritimes states that it expects to place the Phase IV facilities into service in November 2008.

3. Maritimes states that its starting point for the proposed specifications was the interim guidelines from the White Paper on Natural Gas Interchangeability and Non-Combustion End Use (Interim Guidelines).³ Maritimes asserts that it also relied on the Commission's *Policy Statement on Provisions Governing Natural Gas Quality and Interchangeability in Interstate Natural Gas Pipeline Company Tariffs* (Policy Statement) issued on June 15, 2006.⁴ Maritimes states that its proposal is based on Maritimes historical data and the Interim Guidelines, but also reflects the input of the participants in the collaborative process, as well as significant compromise among various stakeholders in an effort to reach a consensus on the filing.

4. Maritimes observes that Algonquin has been working to address gas quality and interchangeability issues on Algonquin's system. On February 20, 2008, Algonquin filed revised quality specifications in a Stipulation and Agreement (Settlement). The Settlement was certified to the Commission by the Presiding Judge and is currently pending before the Commission.⁵ Maritimes states that many of the key stakeholders in the Algonquin collaborative process are also key stakeholders in the Maritimes' collaborative process. Maritimes states that each mainline firm service agreement on the Maritimes system has the Algonquin and Tennessee interconnections as primary points of delivery for the entire MDTQ. Accordingly, Maritimes states that it is critical for Maritimes' quality specifications to align with those of Tennessee and Algonquin. Maritimes submitted three affidavits⁶ supporting its filing, along with the presentations Maritimes made on September 27, 2006 and November 8, 2007.

³ Submitted to the Commission on February 28, 2005 in Docket No. PL04-3-000 by the NGC+ Interchangeability Work Group.

⁴ 115 FERC ¶ 61,325 (2006).

⁵ *Algonquin Gas Transmission, LLC*, 123 FERC ¶ 63,001 (2008), Docket No. RP07-504.

⁶ Affidavit of Mr. J. Robert Bocock, detailing Maritimes' operational history, flow characteristics and historic gas quality and interchangeability data. Affidavit of Mr. John R. Hand, detailing how the Interim Guidelines and historic data shaped the filing. Affidavit of Mr. Mark E. MacPherson, detailing timely gas quality information to be available to assist parties in determining what changes in gas quality may occur on the system.

5. Maritimes states that its tariff currently specifies a combined limit of four percent by volume for total non-hydrocarbon gas and a 0.2 percent limit on oxygen, neither of which Maritimes is proposing to change. The Interim Guidelines suggest a four percent limit by volume on total non-hydrocarbon gas (inert gas). However, Maritimes proposes more specific limits than the Interim Guidelines for carbon dioxide and combined nitrogen and oxygen, as an accommodation to LDCs and electric generators, and the downstream pipeline markets. A summary of the proposed gas quality and interchangeability specifications is presented in the table below.

Summary of Maritimes's Current and Proposed Gas Quality and Interchangeability Limits

Specification	Maritimes's Tariff Limit	Maritimes's Proposed Tariff Limit
Heating Value	Minimum: 967 Btu/scf Maximum: 1100 Btu/scf	Minimum: 967 Btu/scf Maximum: 1110 Btu/scf
Wobbe Index	No limits	Minimum: 1314 Btu/scf Maximum: 1400 Btu/scf
Carbon Dioxide	Maximum: 3.0 % vol	Maximum: 2.0 %* vol
Oxygen + Nitrogen	No limits	Maximum: 2.75 % vol
Carbon Dioxide + Nitrogen + Other Inerts	Maximum: 4.0 % vol	Maximum: 4.0 % vol
Oxygen	Maximum: 0.2 % vol	Maximum: 0.2 % vol
Hydrogen Sulphide	Maximum: .25 grain/100 cf	Maximum: 0.25 grain/100 cf
Sulphur	Maximum: 20 grains/100 cf	Maximum: 2 grains/100 cf
Ethanes plus (C2+)	No limits	Maximum 12 % vol
Butanes plus (C4+)	No limits	Maximum 1.5 % vol

* Maritimes will allow 2.25 percent of carbon dioxide if it determines that it can commingle the gas so that gas delivered into a downstream pipeline contains no more than 2.0 percent by volume.

6. Finally, Maritimes modified section 12.5. Modified section 12.5(a) would permit Maritimes to waive its gas quality receipt specifications when interruption of supply available to the system results in quantities available equal to or less than the directly connected LDC and end-use markets. The modified provision also states that Maritimes will post the waiver on its website. New section 12.5(b) provides that Maritimes may waive the gas quality specifications for receipts provided that the out-of-spec gas does not adversely affect the system or system operations and provided that, once blended, the commingled stream at any delivery point will meet the tariff quality specifications.

Public Notice, Intervention and Comments

7. Notice of Maritimes' filing was issued on May 14, 2008. Interventions and protests were due as provided in section 154.210 of the Commission's regulations, 18 C.F.R. § 154.210 (2007). Pursuant to Rule 214, 18 C.F.R. § 385.214 (2007), all timely-filed motions to intervene and any motions to intervene out-of-time before the issuance date of this order are granted. Granting late intervention at this stage of the proceeding will not disrupt this proceeding or place additional burdens on existing parties.

8. Protests or comments were filed by Mobil Natural Gas Inc. (Mobil), Casco Bay Energy Company, LLC (Casco Bay), Weaver's Cove Energy, LLC (Weaver's Cove), Calpine Energy Services, L.P. (Calpine), New England Power Generators Association, Inc. (NEPGA), Bucksport Energy, LLC (Bucksport), Repsol Energy North America Corporation (Repsol), National Grid Gas Delivery Companies⁷ (National Grid), and EnCana Corporation (EnCana). These protests and comments raise a number of concerns with Maritimes's proposal.

9. National Grid, Repsol and EnCana support Maritimes' proposed gas quality and interchangeability standards, noting that the proposal reflects the collaborative efforts of Maritimes and diverse stakeholders, and yet is generally consistent with the Interim Guidelines and the Policy Statement. Repsol states that it is essential that the standards are not made stricter than those proposed, because stricter standards could limit sources of LNG. National Grid states that the filing takes into account anticipated issues facing end-users and projected future operations on the system. National Grid states that neither a technical conference nor an evidentiary hearing is needed to further develop the record. National Grid states that the Commission should approve the filing to be effective as proposed based on: (a) the wide support of the participants; (b) the thoroughness of the underlying scientific and technical data; and (c) other information contained in the collaborative process presentations.

10. Casco Bay states that the introduction of LNG into Maritimes may result in a number of unintended consequences regarding power plant operation and performance, which could negatively impact the reliability of the electric grid. Casco Bay states that, while it supports Maritimes' plans to increase capacity and bring new gas supplies on line, and it agrees that gas specifications should align with the specifications of downstream pipelines, the impact of the proposed gas quality specifications are of

⁷ The National Grid Delivery Companies are: Brooklyn Union Gas Company; KeySpan Gas East Corporation; Boston Gas Company; Colonial Gas Company; Essex Gas Company; Energy North Natural Gas, Inc.; Niagara Mohawk Power Corporation; and The Narragansett Electric Company.

significant concern and their impact on gas fired generating units is largely unknown at this time. Casco Bay states that it is not known what effect the introduction of LNG will have with regard to consistency of Btu levels.

11. Casco Bay and NEPGA state that they contacted their turbine manufacturer, Siemens, about the possible impact of LNG on its turbines, and Siemens replied that it could not state with certainty the long term effects because long term operational experience is still being developed. However, Siemens recommended: (1) installation of plant specific Wobbe metering; (2) addition of a higher level of combustion chamber dynamic monitoring (ARGUS FFT) to each turbine; and (3) more frequent tuning of turbines based on metering/monitoring results and/or any major changes in heating values anticipate. Casco Bay states that this will be expensive. Casco Bay notes that Siemens also stated that large swings or rapid changes in fuel heating value or Wobbe Index may result in a unit trip, and retuning may be required, and megawatt output may be lower when operating on LNG. Calpine states that auto tuning is not an available option for all generators, stating that GE has informed Calpine that the auto-tuning system it is developing is not suitable for GE turbines which also contain third party components. In addition, auto-tuning equipment remains unproven technology in the early testing stage.

12. Casco Bay states that a unit trip could have potentially severe consequences, such as a prolonged outage, extended maintenance if damage has occurred to the unit, at substantial cost to Casco Bay, and loss to the grid. Casco Bay states that in 2006 it experienced a unit trip due to a "lean blow out" condition caused by an abrupt drop in delivered gas Btu content of approximately 82 Btu/cf. Casco Bay states that the drop was attributed to backhauling gas from an alternate system during a Sable outage, and the unit required retuning to prevent a recurrence.

13. Casco Bay, Bucksport, and NEPGA state that Maritimes proposal to post hourly average chromatograph readings for mainline chromatographs at certain points on the system is inadequate. Casco Bay asserts that it requires 48 to 72 hours lead time to tune equipment. Further, since Casco Bay does not have a tuner on staff, it would have to locate one, which may be more difficult if other generating units are also scrambling to obtain a tuner. Casco Bay notes that expensive auto-tuning equipment is not yet proven, and may not be a simple answer. NEPGA and Casco Bay state that tuning could require hours or days and cannot be performed in advance of the gas supply entering the turbine because the tuning must take place using the new gas supply.

14. NEPGA and Calpine dispute the Wobbe range proposed by Maritimes, stating that the historical average is 1355 and the relevant range is 1328.5 to 1395.7. NEPGA asserts that a Wobbe range of 1314 to 1390 would provide greater protection from a wide swing in fuel variability for Maritimes' sensitive end-users. Calpine and NEPGA assert that

Maritimes has failed to demonstrate that an upper Wobbe limit of 1400 is required to attract adequate LNG supplies to the Canaport facility, noting that LNG supplies from Qatar, Libya, Nigeria and Oman result in Wobbe limits at or below 1390.

15. Casco Bay and NEPGA note that Maritimes recognizes the concern that electric generators are potentially the most sensitive to changes in the Wobbe Number, and large variability may cause combustion and emissions issues. Casco Bay cites the North American Electric Reliability Council, when it states that “Modern combustion turbines have more stringent gas delivery requirements than older units...Consistent fuel quality is necessary for the generator to meet operational and environmental requirements. These newer, larger, combustion turbine/combined cycle units are less tolerant to variations in gas quality and pressure than older units.”⁸ NEPGA states that Maritimes has failed to properly consider the inherent flexibilities set forth in the Policy Statement to accommodate regional and technological limitations.

16. NEPGA states that the Wobbe variation of +/- 4 percent does not assure the reliability or efficiency of the generating fleet operating within the range of possible fuel composition and the potential rates of change, under Maritimes’ proposal. Calpine urges the Commission to establish a Wobbe rate of change that does not exceed 2 percent per minute, stating that rate of change is a key factor impacting turbine reliability.

17. National Grid states that the proposed combined nitrogen and oxygen limit of 2.75 percent is appropriate for Maritimes, noting that the Algonquin Settlement currently before the Commission establishes a nitrogen/oxygen limit of 2.75 percent. National Grid asserts consistency with the specifications in effect for downstream markets will provide Maritimes’ shippers with the maximum opportunity to deliver into downstream markets.

18. EnCana supports Maritimes’ proposed 2 percent carbon dioxide limits, even though it would prefer it to remain at the existing 3 percent. National Grid supports Maritimes’ proposed limit, noting that Algonquin’s settlement proposes the same carbon dioxide limit. EnCana believes that the proposed carbon dioxide levels, in conjunction with the proposed waiver provisions, strike an appropriate balance between maximizing supply and safety and reliability concerns. EnCana states that this approach is consistent with the Commission’s policy of encouraging pipelines to develop flexible gas quality specifications that permit “quick response to rapidly changing situations” and preserve the pipeline’s “ability to transport out-of-spec gas without jeopardizing system operations.”

⁸ North American Electric Reliability Council, *Gas/Electricity Interdependencies and Recommendations* at p 8, (June 15, 2004) (available at: ftp://www.nerc.com/pub/sys/all_updl/pc/geitf/GEITF_ReportBOTapprvd_061504.pdf)

19. Mobil opposes Maritimes' proposed carbon dioxide level, stating that it could restrict new supplies from the Deep Panuke Field. Mobil states that the lack of any demonstrated operational need combined with the potential detriment of both new and existing supplies, demonstrates that the proposed change in the carbon dioxide limit is contrary to the Policy Statement and thus unjust and unreasonable. Mobil states Maritimes was originally constructed to provide transportation for the Sable Offshore Energy Project (Sable), which gas historically contains well below 2 percent carbon dioxide, thus providing opportunities for blending. Mobil asserts that Maritimes does not show that continuing to accept gas subject to the current 3 percent specification will have any negative impact on safety or reliability. Mobil asks that the Commission either reject the proposed carbon dioxide limit, or adopt a procedure that requires Maritimes to provide support for the proposal.

20. National Grid and EnCana support Maritimes' proposal to lower its sulphur limit from 20 grains per 100 cubic feet to 2 grains. EnCana states that it would have preferred a more permissive sulphur limit, but supports the proposal as an acceptable compromise. National Grid states that this limit is reasonable, consistent with Maritimes' historical data and actual operating experience, and will not restrict any existing supply or supply currently being developed from entering Maritimes' system. National Grid asserts that this limit is environmentally beneficial.

21. NEPGA asserts that Maritimes' tariff should expressly limit Maritimes' ability to waive gas quality specifications for receipts only when Maritimes can ensure specification compliant downstream deliveries. Calpine states that the waiver language in section 12.5(b) is unclear and could place unnecessary risk on end users, and should be narrowed or rejected. Calpine urges the Commission to reject Maritimes' proposal to retain the discretion to waive its carbon dioxide specification, stating that Maritimes has given no justification for this. Calpine notes that in *AES Ocean Express, L.L.C. v. Florida Gas Transmission Company*,⁹ the Commission found that "in determining the justness and reasonableness of Florida Gas's gas quality standards, one factor we must consider is the effects those standards will have on downstream gas transporters and users, including whether those standards may impose excessive cost burdens on downstream entities." Casco Bay states elevated carbon dioxide levels cost Casco Bay in environmental credits, and asserts that Maritimes should provide the same quality gas to end users as it does to downstream pipelines.

22. Bucksport, Calpine and NEPGA state that they recognize the benefits of expanding gas supplies, and are willing to invest considerable sums to modify their own facilities to accommodate certain changes in specifications. Bucksport strongly opposes the changes to the waiver provisions, as it states it did in the collaborative process, insofar as it may potentially place Bucksport in the position of either accepting gas which

⁹ Opinion No. 495-A, 121 FERC ¶ 61,267 (2007).

could result in significant damage to its plant and plant facilities or completely shutting down that plant. Bucksport states that such unlimited discretion to deliver gas of virtually any quality whatsoever is contrary to Commission policy and precedent and should not be permitted here.

23. Bucksport, Calpine and NEPGA request a technical conference. Bucksport requests that the revised waiver provisions in section 12.5 be rejected outright, or that they be suspended for the full five month period and set for hearing, with a technical conference initially established to review the inherent unjustness and unreasonableness. Bucksport and NEPGA assert that, although Maritimes suggests it would not waive quality specifications for receipts unless those receipts can be blended to ensure that deliveries at all points would be compliant with gas specifications, the precise language of its tariff does not explicitly provide that assurance.

Discussion

24. The Commission has reviewed Maritimes's tariff filing, as well as the comments and protests, and finds that Maritimes's proposed gas quality and interchangeability standards raise a number of technical, engineering, and operational issues that are best addressed at a technical conference. At the technical conference, the Staff and parties will have an opportunity to further discuss Maritimes's justification and support for its proposed gas quality and interchangeability specifications.

25. Maritimes should be prepared to address all concerns raised by the parties in their comments and to provide technical, engineering, and operational support for its proposed gas quality and interchangeability specifications, as appropriate. Consistent with the Commission's Policy Statement, Maritimes should be prepared to explain how its proposal differs from the Interim Guidelines.¹⁰ In addition, any party proposing alternatives to Maritimes' proposal should also be prepared to support its position with adequate technical, engineering, and operational information. Based upon its analysis of the information provided in this proceeding, the Commission Staff may issue data requests prior to the technical conference, and/or a notice of the technical conference containing questions that need to be addressed by Maritimes or other parties at the conference. Finally, the Commission Staff is directed to convene a technical conference to address the issues raised by Maritimes' filing and to report the results of the conference to the Commission within 120 days of the date this order issues.

¹⁰ Policy Statement at P 34 and 37.

Suspension

26. Based on a review of the filing, the Commission finds that the proposed tariff sheets have not been shown to be just and reasonable, and may be unjust, unreasonable, unduly discriminatory, or otherwise unlawful. Accordingly, the Commission will accept the tariff sheets for filing, and suspend their effectiveness for a maximum period to be effective November 11, 2008, or an earlier date set by subsequent Commission order, subject to the conditions in this order.

27. The Commission's policy regarding tariff filing suspensions is that such filings generally should be suspended for the maximum period permitted by statute where preliminary study leads the Commission to believe that the filing may be unjust, unreasonable, or that it may be inconsistent with other statutory standards. *See, Great Lakes Gas Transmission Co.*, 12 FERC ¶ 61,293 (1980) (five-month suspension). It is recognized, however, that shorter suspensions may be warranted in circumstances where suspension for the maximum period may lead to harsh and inequitable results. *See, Valley Gas Transmission, Inc.*, 12 FERC ¶ 61,197 (1980) (minimum suspension). The Commission finds that such circumstances do not exist here. Therefore, the Commission will exercise its discretion and suspend the proposed tariff sheets for the maximum period and permit them to become effective November 11, 2008, subject to the outcome of the technical conference established herein and further orders of the Commission.

The Commission orders:

(A) The tariff sheets listed in footnote No. 1 are accepted and suspended, to be effective November 11, 2008, or an earlier date set by subsequent Commission order, subject to the outcome of the technical conference established in this proceeding and further orders of the Commission.

(B) The Commission Staff is directed to convene a technical conference to address the issues raised by Maritimes's filing and to report the results of the conference to the Commission within 120 days of the date this order issues.

By the Commission.

(S E A L)

Kimberly D. Bose,
Secretary.